

### 7.5.2 Basic Type 2A Usage Rates

SBC Communications led this category with an average rate of \$0.018088. Nynex was last with an average rate for its six locations of \$0.042063. U S West was the median for this category with an average of \$0.0245. Like the Basic Type 1 Usage Rates, the RBOC average of \$0.027207 was slightly higher than the \$0.026923 average for all of the locations. Chart 7-61 depicts the rates.

RBOC	Average Basic Type 2A Usage Rate	Ranking
Ameritech	\$0.020875	3rd
Bell Atlantic	\$0.020316	2nd
BellSouth	\$0.025107	5th
Nynex	\$0.042063	7th
Pacific Bell	\$0.0395	6th
SBC Communications	\$0.018088	1st
U S WEST Communications	\$0.0245	4th

### 7.5.3 Basic Type 2B Usage Rates

The mean average rate for all of the RBOCs (\$0.020887) was less than the average for all of the locations (\$0.022346). Ameritech had the lowest rate at \$0.009259 while the average rate for Nynex locations was over three times greater at \$0.042063. Chart 7-62 illustrates the Basic Type 2B Usage Rates.

RBOC	Average Basic Type 2B Usage Rate	Ranking
Ameritech	\$0.009259	1st
Bell Atlantic	\$0.0143	3rd
BellSouth	\$0.022096	5th
Nynex	\$0.042063	7th
Pacific Bell	\$0.0274	6th
SBC Communications	\$0.012442	2nd
U S WEST Communications	\$0.0206	4th

#### 7.5.4 Average DS1 Price Per Foot

On average the RBOCs had slightly lower rates than the other locations. The mean average rate for all RBOC locations was \$0.017908 while the mean average for all locations was \$0.018548 per foot. BellSouth had the lowest rate at \$0.014112 while Pacific Bell had the highest rates at \$0.023674. U S West was again the median price at \$0.016932 per foot. Nynex had the second lowest rate in this category (\$0.014716) but this may be somewhat misleading because of the study assumptions. Nynex does not have a facility charge for either Type 2A or Type 2B. Therefore the Nynex rate only included the Type 1 and private line links to the cell cites in calculating the average DS1 rate.

Chart 7-63 shows the average DS1 rate per foot for each RBOC.

RBOC	Average DS1 Rate Per Foot	Ranking
Ameritech	\$0.017693	5th
Bell Atlantic	\$0.021308	7th
BellSouth	\$0.014112	1st
Nynex	\$0.014716	2nd
Pacific Bell	\$0.023674	6th
SBC Communications	\$0.01692	3rd
U S WEST Communications	\$0.016932	4th

### 7.5.5 Total Type 1 Usage Rates

The only change in the rankings between the Basic Type 1 and Total Type 1 rates was Bell Atlantic and Nynex swapped spots for the highest rate. The mean average Total Type 1 rate for the RBOCs was slightly higher at \$0.05627 than the mean average for all locations (\$0.050957). This is basically due to the fact that the rates for Bell Atlantic and Nynex exceed the RBOC and national averages by more than a standard deviation. SBC Communications had the lowest Total Type 1 Usage Rate at \$0.024679. The results are depicted in Chart 7-64.

RBOC	Average Total Type 1 Usage Rate	Ranking
Ameritech	\$0.06151	5th
Bell Atlantic	\$0.092196	7th
BellSouth	\$0.027245	2nd
Nynex	\$0.091479	6th
Pacific Bell	\$0.053518	4th
SBC Communications	\$0.024679	1st
U S WEST Communications	\$0.043264	3rd

### 7.5.6 Total Type 2A Usage Rates

SBC Communications once again had the lowest rate at \$0.018983 per MOU. The mean average for the RBOCs (\$0.028931) was slightly higher than the average for all locations (\$0.028767). Nynex had the highest Total Type 2A Usage rate (\$0.042063) even though Nynex does not charge for facilities for Type 2A connections. U S WEST Communications was again the median for the RBOCs at \$0.025682. These rates are illustrated in Chart 7-65.

RBOC	Average Total Type 2A Usage Rate	Ranking
Ameritech	\$0.022353	2nd
Bell Atlantic	\$0.024097	3rd
BellSouth	\$0.027734	5th
Nynex	\$0.057612	7th
Pacific Bell	\$0.041609	6th
SBC Communications	\$0.018983	1st
U S WEST Communications	\$0.025682	4th

### 7.5.7 Total Type 2B Usage Rates

Like the other categories, Total Type 2B Usage Rates had a tremendous range of rates with Ameritech being the lowest (\$0.011533) and Nynex the highest (\$0.042063). The mean average RBOC rate (\$0.02338) was less than the mean average for all locations (\$0.024901). U S WEST Communications was once again the median price at \$0.021993. Chart 7-66 provides a graphic depiction of the Total Type 2B Usage Rates.

RBOC	Average Total Type 2B Usage Rate	Ranking
Ameritech	\$0.011533	1st
Bell Atlantic	\$0.019958	3rd
BellSouth	\$0.025099	5th
Nynex	\$0.042063	7th
Pacific Bell	\$0.0299	6th
SBC Communications	\$0.013113	2nd
U S WEST Communications	\$0.021993	4th

### 7.6 Number Charges

Numbers are almost important to wireless carriers as radio spectrum but obtaining numbers has not always been easy for wireless carriers. With the exception of Hawaii and part of Florida, traditional telephone numbers are assigned by the major RBOC in the area. Assignments for Hawaii and part of Florida are controlled by GTE.

In a 1987 decision, the FCC clearly stated that the LEC's do not "own" the telephone numbers. However, for Type 2 connections, they are allowed to charge a fee that recovers the cost of activating the entire NXX code (10,000 numbers) that are used for Type 2 connections.

Type 1 connections may also utilize full NXX codes but often these connections use blocks of numbers from an existing NXX code. These blocks may range from a hundred numbers to several thousand numbers. For shared NXX code situations, the LECs may also recover the cost of administering these numbers since the numbers officially reside in a LEC switch rather than at a wireless carrier's switch or Point Of Interconnection (POI).

Other types of interconnections, such as ISDN-BRI or DID, may utilize either entire NXX codes or blocks of numbers. The charges are usually, but not always, the same as those listed in Table 7-3 below.

#### **7.6.1 Charges For NXX Code Activation**

When an entire NXX code is activated, the LEC must modify the routing tables in all of their switches within a given Local Access Transport Area (LATA) so that the switch will know how to route the call. This helps the switch to determine whether the LEC is a candidate to transport the call or whether it must be handled by an Interexchange Carrier (IC). LATAs may range in size from an entire state (like South Dakota) or a relatively small area like Panama City, Florida. The number of switches involved may range from less than a dozen to more than a hundred which is one reason for some price variations. In addition, the type of switch can influence the time required to make these changes. Most of the switches today are electronic devices so the work effort is simply typing instructions. Older switches require actual physical wiring changes.

Switching machines located outside the LATA are informed of the code activation via a publication issued by Bellcore called the Local Exchange Routing Guide (LERG). However, no action is needed for these switches as they will simply route the call to a designated IC which will then route the call.

As shown in Table 7-3 below, there is a tremendous range of charges for this purpose. Some LECs charge absolutely nothing while others may charge as much as \$30,000 to activate an entire NXX code. The average cost is \$3,738 for all of the surveyed locations.

#### 7.6.2 Charges For Activating Blocks Of Numbers

Similar to charges for activating an entire NXX code, there is a large disparity between LECs regarding the monthly charges for blocks of numbers from a shared NXX code. These charges range from zero to \$0.5295 per number, per month, and the mean average charge is \$0.093063 per number, per month. Table 7-3 also depicts the monthly charges per number for each of the surveyed locations.

**Table 7-3**  
**Summary Of Charges For Telephone Numbers**

<u>Location</u>	<u>Local Exchange Carrier</u>	<u>NXX Activation Charge</u>	<u>Monthly Charge Per Number</u>
Alabama (Birmingham)	BellSouth	\$4,300.00	\$0.005
Alaska (Anchorage)	Alaska Telephone Utilities	\$2019.72	\$0.00
Arizona Phoenix	U S WEST Communications	\$0.00	\$0.015
Arkansas(Little Rock)	SBC Communications	\$8,300.00	\$0.00



California (Los Angeles)	GTE	\$11,950.00	\$0.0775
California (Los Angeles)	Pacific Bell	\$30,600.00	\$0.0041
California (San Francisco)	Pacific Bell	\$22,400.00	\$0.0041
Colorado (Denver)	U S WEST Communications	\$0.00	\$0.015
Connecticut (Hartford)	Southern New England Telephone (SNET)	\$5,000.00	\$0.5295
Delaware (Wilmington)	Bell Atlantic	\$0.00	\$0.28
District of Columbia (Washington, DC)	Bell Atlantic	\$0.00	\$0.1435
Florida (Miami)	BellSouth	\$4,800.00	\$0.005
Florida (Orlando)	Sprint LTD	\$7,400.00	\$0.004
Florida (Tampa)	GTE	\$10,000.00	\$0.005
Georgia (Atlanta)	BellSouth	\$4,745.00	\$0.005
Hawaii (Honolulu)	GTE	\$6,500.00	\$0.0689
Idaho (Boise)	U S WEST Communications	\$0.00	\$0.015
Illinois (Chicago)	Ameritech	\$8,764.00	\$0.02
Indiana (Indianapolis)	Ameritech	\$1,400.00	\$0.2175
Iowa (Des Moines)	U S WEST Communications	\$0.00	\$0.015
Kansas(Wichita)	SBC Communications	\$6,800.00	\$0.00

<b>Kentucky</b> <b>(Louisville)</b>	BellSouth	\$1,875.00	\$0.005
<b>Louisiana (New Orleans)</b>	BellSouth	\$2,904.85	\$0.005
<b>Maine</b> <b>(Bangor)</b>	Nynex	\$4,500.00	\$0.00
<b>Maryland</b> <b>(Baltimore)</b>	Bell Atlantic	\$0.00	\$0.1435
<b>Massachusetts</b> <b>(Boston)</b>	Nynex	\$0.00	\$0.01
<b>Michigan</b> <b>(Detroit)</b>	Ameritech	\$1,800.00	\$0.04
<b>Minnesota</b> <b>(Minneapolis)</b>	U S WEST Communications	\$0.00	\$0.015
<b>Mississippi</b> <b>(Jackson)</b>	BellSouth	\$3,200.00	\$0.005
<b>Montana</b> <b>(Helena)</b>	U S WEST Communications	\$0.00	\$0.0148
<b>Nebraska</b> <b>(Lincoln)</b>	Lincoln Telephone	\$6,140.00	\$0.00
<b>Nebraska</b> <b>(Omaha)</b>	U S WEST Communications	\$0.00	\$0.015
<b>Nevada</b> <b>(Las Vegas)</b>	Sprint LTD	\$5,000.00	\$0.004
<b>Nevada</b> <b>(Reno)</b>	Nevada Bell	\$960.00	\$0.00
<b>New Hampshire</b> <b>(Nashua)</b>	Nynex	\$4,500.00	\$0.00
<b>New Jersey</b> <b>(Newark)</b>	Bell Atlantic	\$0.00	\$0.25
<b>New Mexico</b> <b>(Santa Fe)</b>	U S WEST Communications	\$0.00	\$0.015
<b>New York(New York)</b>	Nynex	\$0.00	\$0.00

North Dakota (Bismarck)	U S WEST Communications	\$0.00	\$0.015
Ohio (Cincinnati)	Cincinnati Bell	\$0.00	\$0.3886
Ohio (Cleveland)	Ameritech	\$100.00	\$0.1725
Oklahoma (Oklahoma City)	SBC Communications	\$6,200.00	\$0.00
Oregon (Portland)	U S WEST Communications	\$0.00	\$0.015
Pennsylvania (Pittsburgh)	Bell Atlantic	\$0.00	\$0.28
Puerto Rico (San Juan)	Puerto Rico Telephone Company	\$10,200.00	\$0.30
Rhode Island (Providence)	Nynex	\$4,000.00	\$0.00
South Carolina (Columbia)	BellSouth	\$8,800.00	\$0.005
South Dakota (Sioux Falls)	U S WEST Communications	\$0.00	\$0.015
Tennessee (Nashville)	BellSouth	\$4,100.00	\$0.005
Texas (Dallas)	SBC Communications	\$8,000.00	\$0.00
Utah (Salt Lake City)	U S WEST Communications	\$0.00	\$0.015
Vermont (Burlington)	Nynex	\$1,800.00	\$0.00
Virginia (Richmond)	Bell Atlantic	\$0.00	\$0.115
Washington (Seattle)	U S WEST Comm.	\$0.00	\$0.015
West Virginia (Wheeling)	Bell Atlantic	\$0.00	\$0.1065

<b>Wisconsin (Milwaukee)</b>	<b>Ameritech</b>	<b>\$4,027.00</b>	<b>\$0.1835</b>
<b>Wyoming (Cheyenne)</b>	<b>U S West Comm.</b>	<b>\$0.00</b>	<b>\$0.015</b>

## **8.0 Conclusions And Future Trends**

Telecommunications in the United States, particularly the wireless segment, is a rapidly growing and changing industry. These changes are the result of technological, regulatory, and market forces which will continue to influence growth and change for the foreseeable period. Some of the conclusions and future trends that are germane to this report are outlined in paragraphs below.

### **8.1 Technical Considerations**

Section 3.0 of this report provided an overview of the different types of interconnection used for wireline/wireless interconnection arrangements. Technical descriptions of these interconnection types are contained in a Technical Reference issued by Bellcore that is officially labeled TR-NPL-000145 but is known in the trade as TR-145.

A number of new interconnection arrangements were added to TR-145 in December, 1993, as the result of industry negotiations that took place beginning in 1991. These new arrangements included ISDN, SS7 links, and connections to 911 and Operator Services tandems. Not all LECs offer all of the interconnection types but gradually it is expected that more LECs will offer the full array of interconnection types described in TR-145. Specifically, the Type "S" connection, which is used for SS7 links, will be offered by more LECs because wireless carriers want the benefit of SS7 interconnection. Currently, Type

"S" connections are not offered by large LECs such as GTE, Pacific Bell, SBC Communications and U S WEST Communications but that should change over the next couple of years.

The Wireless Interconnection Forum (WIF), which produced the revised TR-145, is presently trying to determine if any further revisions are required. It has been suggested that SS7 with Type 1 connections may be a possibility. Actually, SS7-connectivity is possible now with Type 1 connections but the SS7 connection must be associated with the LEC switch providing the Type 1 connection. It may not be technically possible to have an SS7 address that is associated with a wireless switch when it has a Type 1 connection since the NXX code resides in the LEC switch, not the wireless switch, in this situation.

Another possible change may involve the Type 2B connection. Currently, as described in Section 3.0, traffic on Type 2B connections is limited to the office providing the connection. However, as local number portability is introduced, this may have to change depending on how the LECs equip their switches to provide the necessary query function. If the LECs only equip their tandem offices to perform this query, a call terminating on an existing Type 2B connection may have to be routed to another office if the number has been "ported" and the LEC is performing the query for the wireless carrier. This scenario does not comport with the present definition of a Type 2B in TR-145.

Currently the activation period for NXX codes is normally 105 days. Discussions are ongoing in the industry and a proposal has been made to reduce this time to 45 days but no agreement has yet been reached.

In spite of an FCC ruling in 1995, NPA splits will continue to be bothersome because of the number of interested parties involved in these actions. The FCC ruling stated that plans should not adversely affect one industry group over another and was aimed at discouraging plans that moved an entire segment, such as wireless, into a new NPA but let

other segments continue to use the existing NPA. However, there is simply no way to satisfy every party and the situation is sometimes complicated by state regulators that impose solutions that are contrary to agreements reached by the industry.

## **8.2 *Regulatory Considerations***

It is still too early to determine whether the FCC will preempt the states regarding regulating interconnection rates. In its December, 1995, decision, the FCC proposed a "bill and keep" solution in which carriers would terminate traffic on their respective networks without charge to the originating carrier. Each carrier would keep all of the revenue for originating traffic. The FCC is seeking comments on several alternatives that range from simply providing guidelines to complete federal control over interconnection rates. This docket will probably not be settled quickly but, regardless of the outcome, will affect the compensation arrangements between wireless and wireline carriers.

States have already been preempted with respect to regulating rates charged to customers by wireless carriers. Some have sought to impose regulation through control over certification proceedings and other market entry regulations. Such actions may affect interconnection rates, at least in the short term.

States are also taking the lead on number portability issues which may also affect interconnection rates. Issues yet to be decided are cost recovery, which carriers should be included in the portability universe, which technical solution(s) should be adopted, and how non-participating carriers should be treated with respect to paying for queries used to determine proper call routing. Since wireless carriers currently do not have the technical capability to perform these queries themselves, the LECs (or someone else) will have to perform this function in the interim.

### **8.3 *Interconnection Rates and Rate Structures***

Over the last decade, the trend in interconnection rates has been one of declining prices. This trend will not only continue but will probably accelerate due to regulatory actions and the inexorable drive for local loop competition.

Interconnection rates have often been based on rate elements used for access services. While this may continue, the access rates themselves have been reduced in the past, resulting in lower interconnection rates for wireless carriers. These access rate elements should continue to decline and, for those companies whose rates are almost entirely based on access rate elements, will likely result in lower interconnection rates.

Some LECs have broken the link between access rate elements and interconnection rates and have substituted negotiated rates. While the access rate elements may not be totally apparent in these situations, there is still some link between the two because the LECs must maintain some sense of parity between rates charged for similar types of services. Nonetheless, where this substitution has occurred, lower interconnection rates have resulted.

Parity between rates charged to different carriers, however, is not always easily defined. Competitive Local Exchange Carriers (CLECs) have negotiated interconnection rates with the LECs. These rates, which are usually approved by the state regulatory agency, are sometimes lower than the rates charged to wireless carriers. A goal of the wireless carriers is to achieve parity with the CLECs but doing so may require acceptance of additional regulatory burdens from a state. Compromises may be needed but achieving this goal of parity should result in lower interconnection rates for the wireless carriers.

Finally, the FCC's NPRM in Docket 95-185 addressing compensation arrangements will almost assuredly result in lower interconnection rates. The FCC's proposed "bill and

keep” solution would basically eliminate usage-based interconnection charges. CTIA believes that interconnection revenues from wireless carriers for LECs in 1994 was about \$800 million. This is very close to the conservative estimate by MTA-EMCI of \$816 million for the same period. Based on estimated 1996 wireless revenues, MTA-EMCI estimates LEC interconnection revenues should be about \$1.309 million. In any event, this is a large revenue stream for the LECs to lose.

As alternatives to “bill and keep,” the FCC is also seeking comment on using bill and keep for off-peak usage only, using a subset of access rate elements, using other interconnection rates as a basis for wireless rates, or adopting a uniform per-minute interconnection charge. All of these alternatives should result in lower interconnection rates for wireless carriers.

January 3, 1996

3280r1/HEY



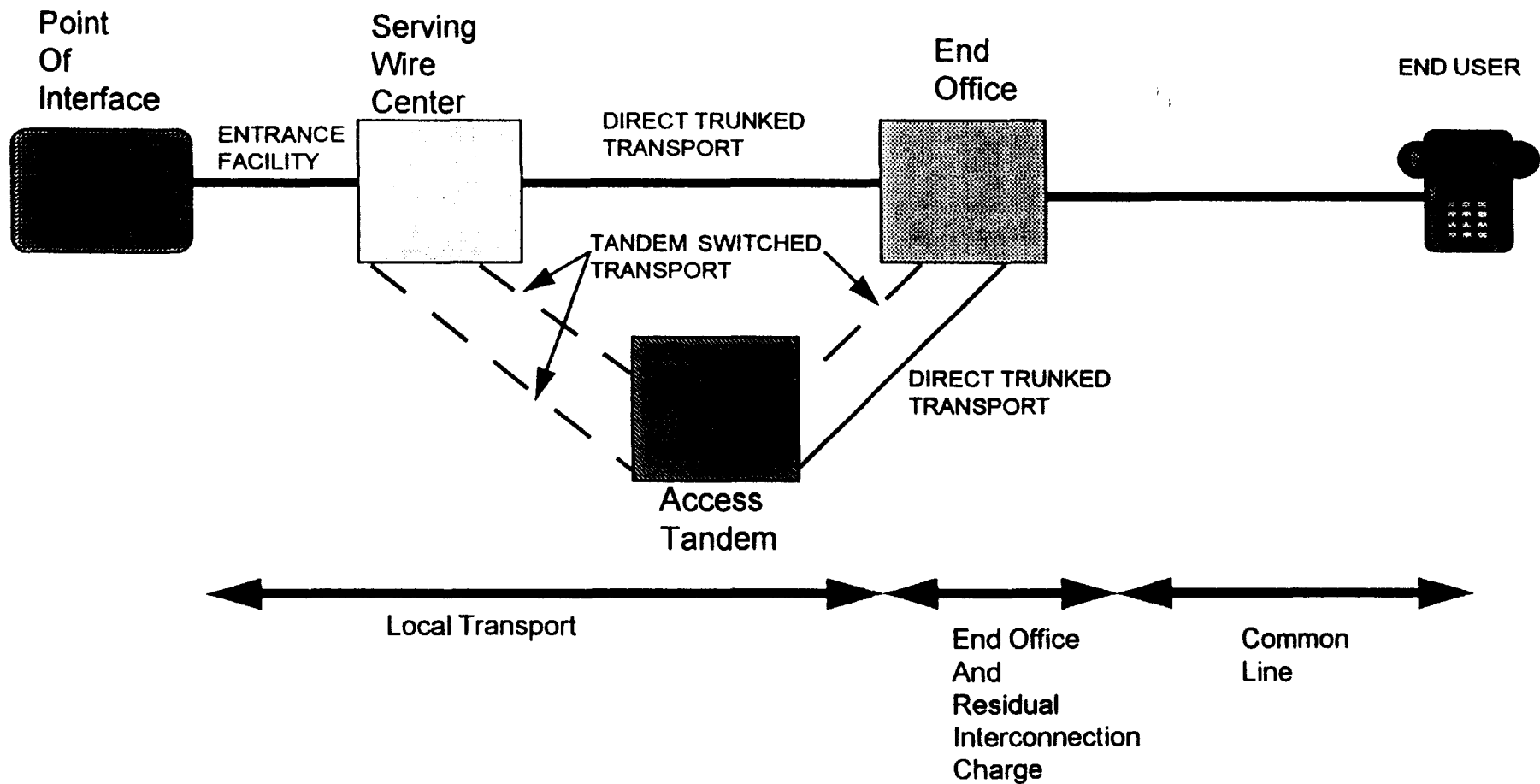
**APPENDIX 7-1**  
**SUMMARY OF AVERAGE USAGE AND DS1 RATES**

<u>Location By State (City)</u>	<u>Type 1 Basic</u>	<u>Type 2A Basic Rate</u>	<u>Type 2B Basic Rate</u>	<u>Avg. DS1 Cost/Foot</u>	<u>Type 1 Total Rate</u>	<u>Type 2A Total Rate</u>	<u>Type 2B Total Rate</u>
Alabama (Birmingham)	\$0.02231	\$0.02231	\$0.02231	\$0.013226	\$0.024794	\$0.025226	\$0.025508
Alaska (Anchorage)	\$0.0202	\$0.0202	\$0.0202	\$0.014998	\$0.021199	\$0.021285	\$0.022078
Arizona (Phoenix)	\$0.0481	\$0.0245	\$0.0206	\$0.025124	\$0.049793	\$0.02566	\$0.021974
Arkansas (Little Rock)	\$0.025	\$0.02	\$0.01	\$0.01115	\$0.025219	\$0.020237	\$0.011604
California (L.A. - GTE)	\$0.023141	\$0.023141	\$0.016869	\$0.024518	\$0.025096	\$0.025265	\$0.019499
California (L.A. - Pacific Bell)	\$0.0449	\$0.0395	\$0.0274	\$0.023674	\$0.053518	\$0.041609	\$0.0299
California (San Francisco)	\$0.0449	\$0.0395	\$0.0274	\$0.023674	\$0.053518	\$0.041609	\$0.0299
Colorado (Denver)	\$0.0528	\$0.0245	\$0.0206	\$0.016202	\$0.054206	\$0.02566	\$0.021974
Connecticut (Hartford)	\$0.037	\$0.037	\$0.037	\$0.027479	\$0.039464	\$0.039472	\$0.039847
Delaware (Wilmington)	\$0.07	\$0.015	\$0.0143	\$0.019984	\$0.079765	\$0.018125	\$0.019958
District Of Columbia (Washington)	\$0.10	\$0.016618	\$0.0143	\$0.024619	\$0.108445	\$0.022037	\$0.019958
Florida (Miami)	\$0.0204	\$0.0204	\$0.0204	\$0.015612	\$0.022022	\$0.02246	\$0.022839
Florida (Orlando)	\$0.0334	\$0.0334	\$0.0334	\$0.013119	\$0.035258	\$0.035374	\$0.035724
Florida (Tampa)	\$0.0326	\$0.0326	\$0.0326	\$0.021096	\$0.034567	\$0.034841	\$0.035309
Georgia (Atlanta)	\$0.0255	\$0.0255	\$0.015	\$0.014362	\$0.027413	\$0.02798	\$0.017855
Hawaii (Honolulu)	\$0.028	\$0.028	\$0.022317	\$0.034314	\$0.031283	\$0.031489	\$0.026425
Idaho (Boise)	\$0.052	\$0.0245	\$0.0206	\$0.015992	\$0.053302	\$0.02566	\$0.021974
Illinois (Chicago)	\$0.05	\$0.0178	\$0.0064	\$0.019414	\$0.057618	\$0.019079	\$0.008397
Indiana (Indianapolis)	\$0.05	\$0.0274	\$0.013	\$0.022225	\$0.056688	\$0.029676	\$0.016776
Iowa (Des Moines)	\$0.0328	\$0.0245	\$0.0206	\$0.016202	\$0.034206	\$0.02566	\$0.021974
Kansas (Wichita)	\$0.025	\$0.02	\$0.01	\$0.016028	\$0.02531	\$0.02042	\$0.013703
Kentucky (Louisville)	\$0.02465	\$0.02465	\$0.02465	\$0.015057	\$0.027749	\$0.028181	\$0.028463
Louisiana (New Orleans)	\$0.0266	\$0.0266	\$0.01	\$0.013784	\$0.028135	\$0.028705	\$0.012574
Maine (Bangor)	\$0.11	\$0.05	\$0.05	\$0.014782	\$0.114766	\$0.05	\$0.05
Maryland (Baltimore)	\$0.10	\$0.022329	\$0.0143	\$0.024619	\$0.1084	\$0.027748	\$0.019958
Massachusetts (Boston)	\$0.044	\$0.036116	\$0.036116	\$0.010066	\$0.046693	\$0.036116	\$0.036116
Michigan (Detroit)	\$0.05	\$0.020077	\$0.008697	\$0.016203	\$0.055468	\$0.021503	\$0.011092
Minnesota (Minneapolis)	\$0.0291	\$0.0245	\$0.0206	\$0.015992	\$0.030402	\$0.02566	\$0.021974
Mississippi (Jackson)	\$0.02151	\$0.02151	\$0.02151	\$0.012647	\$0.022918	\$0.02347	\$0.023876
Missouri (St. Louis)	\$0.025	\$0.018	\$0.01	\$0.018631	\$0.026953	\$0.018826	\$0.012943
Montana (Helena)	\$0.0515	\$0.0245	\$0.0206	\$0.016307	\$0.052958	\$0.02566	\$0.021974
Nebraska (Lincoln)	\$0.035	\$0.05	\$0.03	\$0.02812	\$0.037679	\$0.052679	\$0.032941
Nebraska (Omaha)	\$0.0436	\$0.0245	\$0.0206	\$0.016255	\$0.045032	\$0.02566	\$0.021974

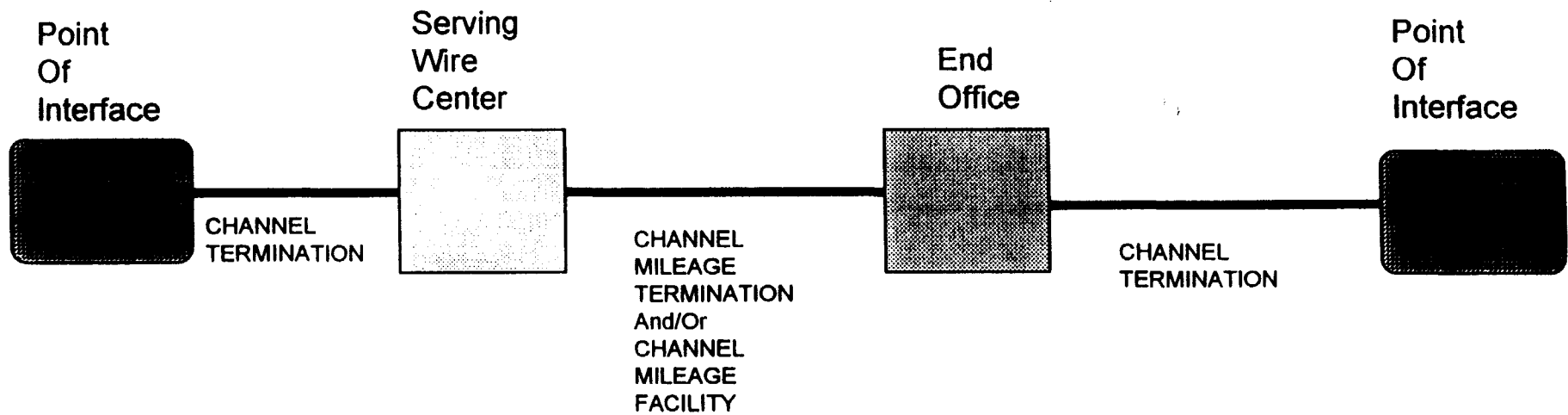
**APPENDIX 7-1**  
**SUMMARY OF AVERAGE USAGE AND DS1 RATES**

<u>Location By State (City)</u>	<u>Type 1 Basic</u>	<u>Type 2A Basic Rate</u>	<u>Type 2B Basic Rate</u>	<u>Avg. DS1 Cost/Foot</u>	<u>Type 1 Total Rate</u>	<u>Type 2A Total Rate</u>	<u>Type 2B Total Rate</u>
Nevada (Las Vegas)	\$0.016286	\$0.016286	\$0.016286	\$0.036983	\$0.020549	\$0.02065	\$0.020954
Nevada (Reno)	\$0.031055	\$0.025	\$0.031015	\$0.009745	\$0.036028	\$0.025	\$0.035988
New Hampshire (Nashua)	\$0.159	\$0.046742	\$0.046742	\$0.014735	\$0.163766	\$0.046742	\$0.046742
New Jersey (Newark)	\$0.065	\$0.017034	\$0.0143	\$0.019984	\$0.070965	\$0.020159	\$0.019958
New Mexico (Santa Fe)	\$0.04686	\$0.0245	\$0.0206	\$0.016781	\$0.048553	\$0.02566	\$0.021974
New York (New York)	\$0.08	\$0.0259	\$0.0259	\$0.016806	\$0.084117	\$0.0259	\$0.0259
North Carolina (Raleigh)	\$0.028	\$0.028	\$0.028	\$0.015854	\$0.030024	\$0.030503	\$0.030927
North Dakota (Bismarck)	\$0.0467	\$0.0245	\$0.0206	\$0.016097	\$0.048054	\$0.02566	\$0.021974
Ohio (Cincinnati)	\$0.066989	\$0.015466	\$0.015466	\$0.018537	\$0.066989	\$0.015466	\$0.015466
Ohio (Cleveland)	\$0.05	\$0.0241	\$0.0116	\$0.017883	\$0.057057	\$0.025829	\$0.013654
Oklahoma (Oklahoma City)	\$0.025	\$0.02	\$0.01	\$0.016582	\$0.026969	\$0.021072	\$0.01249
Oregon (Portland)	\$0.0296	\$0.0245	\$0.0206	\$0.017028	\$0.03085	\$0.025964	\$0.022235
Pennsylvania (Pittsburgh)	\$0.07	\$0.023217	\$0.0143	\$0.019984	\$0.079765	\$0.026342	\$0.019958
Puerto Rico (San Juan)	\$0.07	\$0.07	\$0.07	\$0.043486	\$0.075203	\$0.075629	\$0.076021
Rhode Island (Providence)	\$0.11	\$0.036005	\$0.036005	\$0.016639	\$0.114766	\$0.036005	\$0.036005
South Carolina (Columbia)	\$0.037	\$0.037	\$0.037	\$0.014899	\$0.039591	\$0.040091	\$0.040575
South Dakota (Sioux Falls)	\$0.034086	\$0.0245	\$0.0206	\$0.016044	\$0.035414	\$0.02566	\$0.021974
Tennessee (Nashville)	\$0.01999	\$0.01999	\$0.01999	\$0.011564	\$0.022559	\$0.022991	\$0.023273
Texas (Dallas)	\$0.017259	\$0.012442	\$0.012442	\$0.022212	\$0.018941	\$0.014359	\$0.014827
Utah (Salt Lake City)	\$0.0365	\$0.0245	\$0.0206	\$0.016781	\$0.038193	\$0.02566	\$0.021974
Vermont (Burlington)	\$0.02	\$0.057612	\$0.057612	\$0.015265	\$0.024766	\$0.057612	\$0.057612
Virginia (Richmond)	\$0.09	\$0.02428	\$0.0143	\$0.019984	\$0.098222	\$0.027405	\$0.019958
Washington (Seattle)	\$0.0277	\$0.0245	\$0.0206	\$0.016044	\$0.029028	\$0.02566	\$0.021974
West Virginia (Wheeling)	\$0.09	\$0.023734	\$0.0143	\$0.019984	\$0.099811	\$0.026859	\$0.019958
Wisconsin (Milwaukee)	\$0.08	\$0.015	\$0.0066	\$0.012739	\$0.080721	\$0.015677	\$0.007746
Wyoming (Cheyenne)	\$0.0543	\$0.0245	\$0.0206	\$0.016202	\$0.055706	\$0.02566	\$0.021974
<b>Average Price - All Locations:</b>	<b>\$0.047463</b>	<b>\$0.026923</b>	<b>\$0.022346</b>	<b>\$0.018548</b>	<b>\$0.050957</b>	<b>\$0.028767</b>	<b>\$0.024901</b>

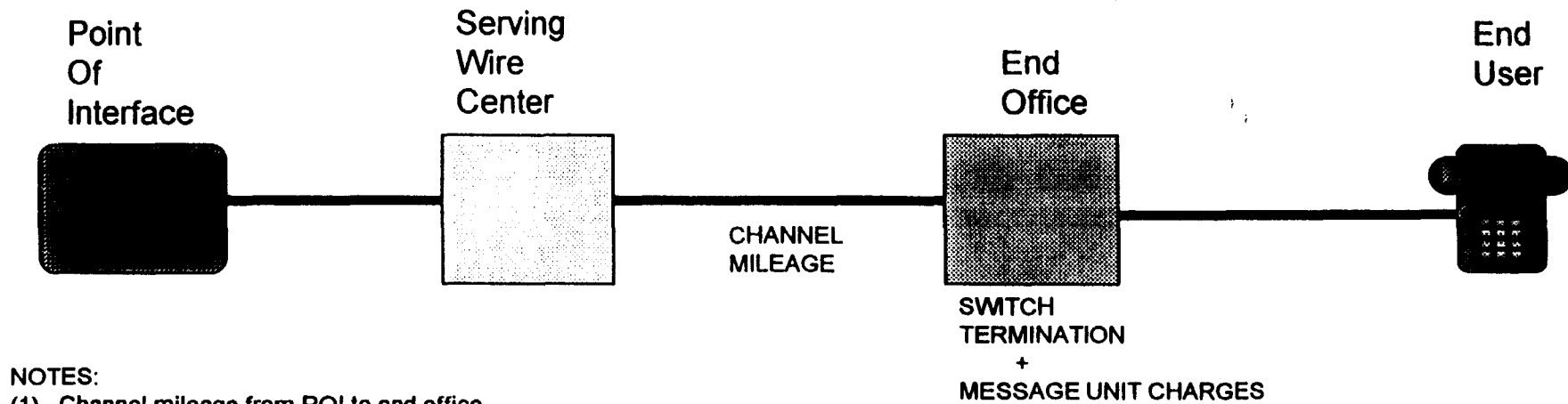
**Figure 6.1**  
**Switched Access Rate Elements**



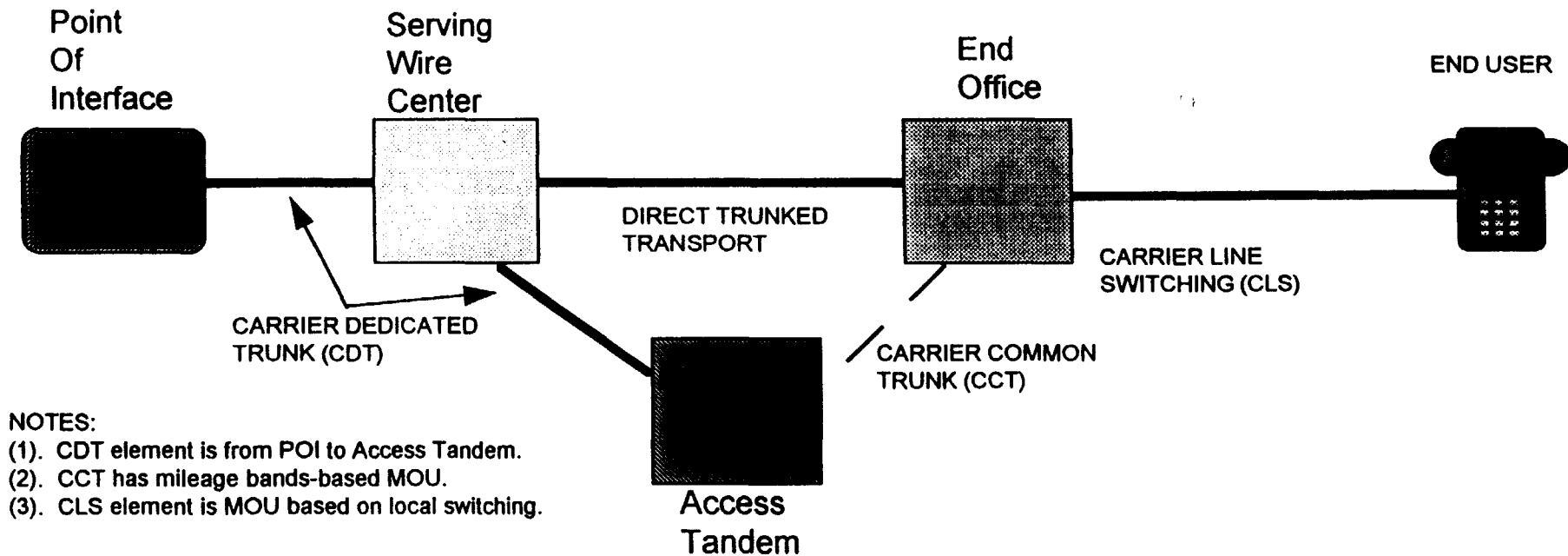
**Figure 6.2**  
**Special Access Rate Elements**



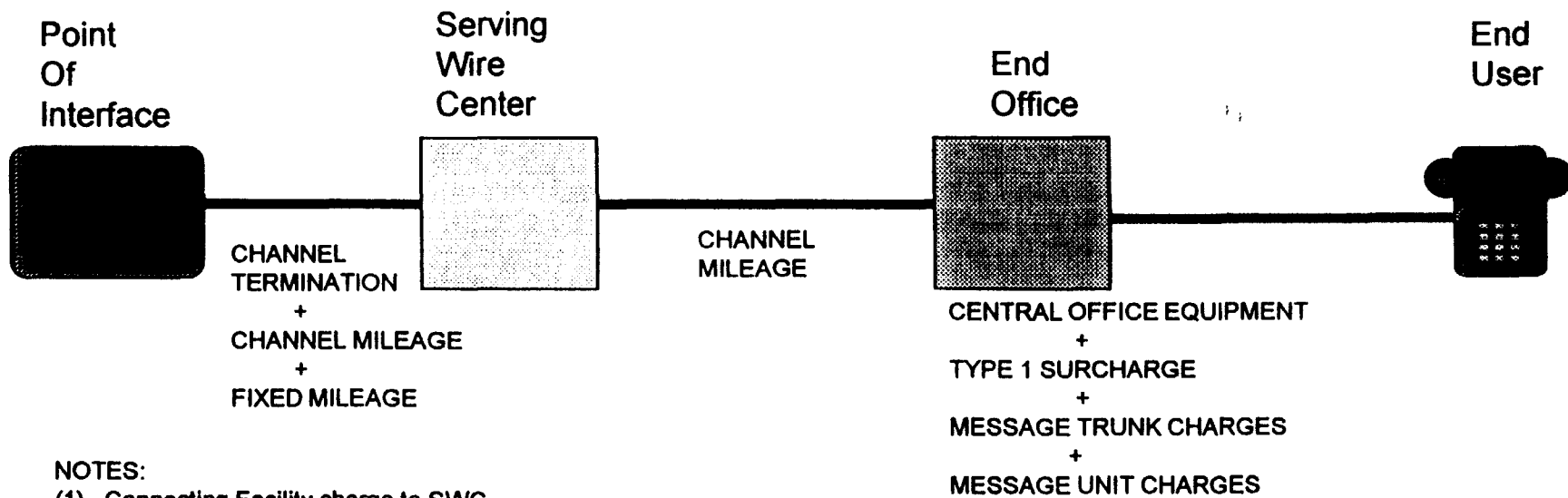
**Figure 6.3**  
**Ameritech Type 1 Rate Elements**



**Figure 6.4**  
**Ameritech Type 2A Rate Elements**



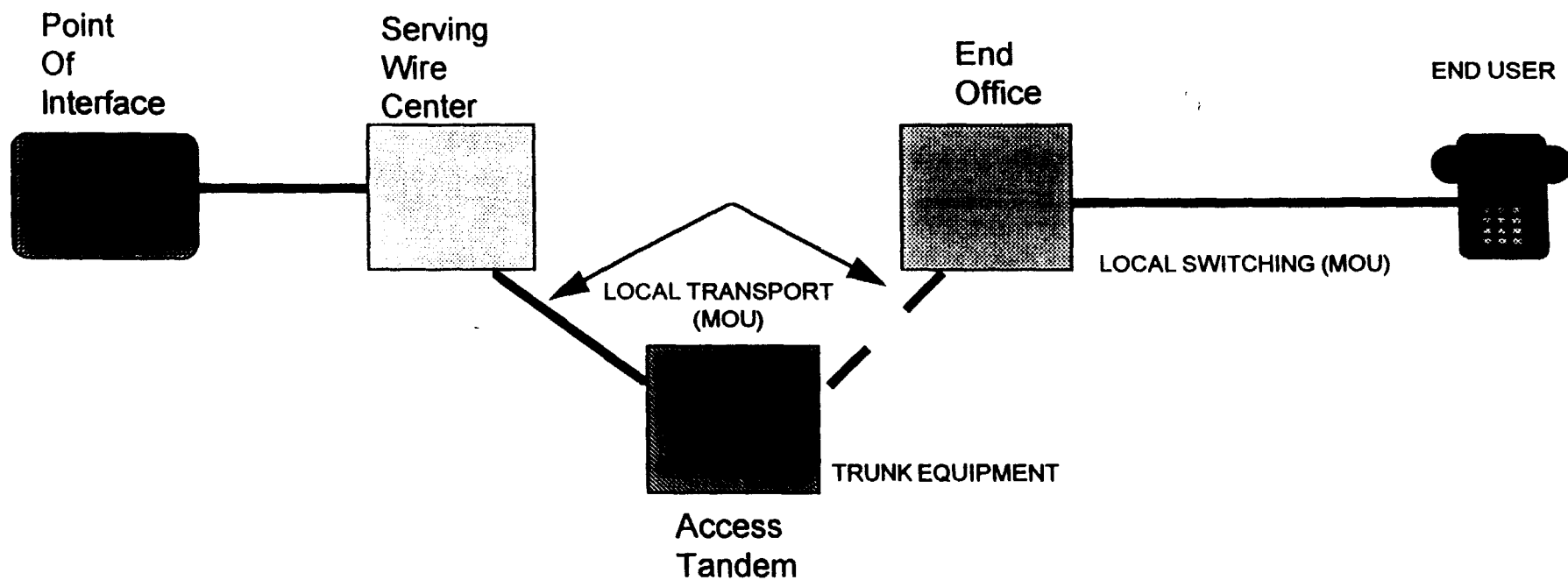
**Figure 6.5**  
**Bell Atlantic Type 1 Rate Elements**



**NOTES:**

- (1). Connecting Facility charge to SWC.
- (2). Message unit charges instead of MOU.

**Figure 6.6**  
**Bell Atlantic Type 2A Rate Elements**

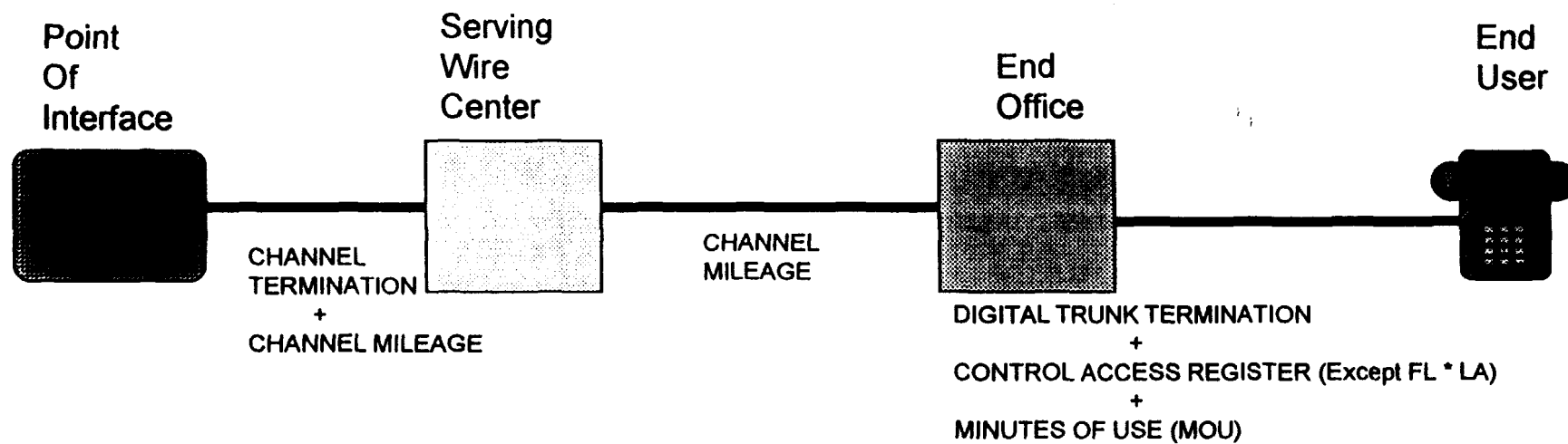


**NOTES:**

- (1). No Connecting Facility Charges For Type 2
- (2). Usage charge includes fixed mileage band and MOU.
- (3). MR charge for trunk equipment.



**Figure 6.7**  
**BellSouth Type 1 Rate Elements**



**NOTES:**

- (1). Connecting Facility charge to End Office..
- (2). LATA-wide MOU rate.